

THE CLAIMS

1. (currently amended) An apparatus for use with a container of liquid that is suspended from an aircraft flying over a ground target area, the container having an outlet through which the liquid can exit the container, said apparatus comprising:

a diffuser configured to diffuse the liquid exiting the container outlet horizontally outward beyond the container into air above the ground target area, said diffuser having a diffuser inlet for receiving the liquid from the container outlet, diffuser outlets for discharging the liquid into the air, and a manifold communicating said diffuser inlet with said outlets, with said manifold supporting said diffuser outlets at locations that are spaced horizontally outward and vertically downward from said diffuser inlet so as to diffuse the liquid by the force ~~on~~ of only gravity.

2-3. (cancelled)

4. (previously presented) The apparatus of claim 1 wherein said manifold has rigid hydraulic lines extending from said diffuser inlet, and also has flexible hydraulic lines extending from said rigid lines to said diffuser outlets to suspend said diffuser outlets from said rigid hydraulic lines under the force of gravity.

5-6. (cancelled)

7. (withdrawn) The apparatus of claim 1 wherein said diffuser further comprises a hydraulic line having first and second ends, with said first end configured to be connected to the container outlet, and said second end configured to be connected to a second aircraft, and wherein said diffuser outlets are spaced apart along said hydraulic line.

8-14. (cancelled)

15. (previously presented) An apparatus comprising:

a container configured to be suspended from an aircraft flying over a ground target area, said container having a container outlet and being vented to enable liquid contents of said container to exit said container through said container outlet by the force of only gravity; and

a diffuser configured to diffuse the liquid, by the force of only gravity, from said container outlet into air above the ground target area throughout a circular area extending horizontally outward beyond said container.

16. (cancelled)

17. (previously presented) An apparatus as defined in claim 15 wherein said circular area is one of a plurality of circular areas throughout which said diffuser is configured to diffuse liquid.

18. (previously presented) An apparatus as defined in claim 17 wherein said circular areas are arranged in a circular array.

19. (previously presented) An apparatus as defined in claim 18 wherein each of said circular areas partially overlaps each circumferentially adjacent circular area.

20. (withdrawn) An apparatus as defined in claim 15 wherein said diffuser has a hydraulic line with a first end configured to be connected to the container outlet, a second end configured to be connected to a second aircraft, and a plurality of diffuser outlets spaced apart along said hydraulic line.

21. (withdrawn) An apparatus as defined in claim 15 wherein said container is free of an outlet valve at said container outlet, whereby said diffuser is permanently open to a gravitational flow of the liquid from said container.

22-25. (canceled)

26. (previously presented) An apparatus for use with a container of liquid that is suspended from an aircraft flying over a ground target area, the container having an outlet through which the liquid is dropped from the container, said apparatus comprising:

a diffuser configured to diffuse the liquid exiting the container outlet horizontally outward beyond the container into the air above the ground target area, whereby the liquid is diffused over a wide area;

said diffuser having a diffuser inlet for receiving the liquid and diffuser outlets for discharging the liquid into the air, said diffuser outlets being spaced horizontally from each other;

said diffuser comprising a manifold communicating said diffuser inlet with said diffuser outlets;

said manifold having rigid hydraulic lines extending from said diffuser inlet, and also having flexible hydraulic lines extending from said rigid lines to said diffuser outlets; and

buoyant structures configured to maintain said diffuser outlets above the container when the container is submerged in a body of liquid.

27. (new) An apparatus comprising:

a container configured to be suspended from an aircraft flying over a ground target area, said container having a container outlet and being vented to enable liquid contents of said container to exit said container through said container outlet by the force of only gravity; and

a diffuser configured to diffuse liquid, by the force of gravity, from said container outlet into air above the ground target area throughout a circular area extending horizontally outward beyond said container;

wherein said diffuser has a diffuser inlet for receiving the liquid from said container outlet, and further has diffuser outlets for discharging the liquid in to the air, said diffuser outlets being spaced circumferentially from each other in a circular array spaced radially outward and vertically downward from said container.

28. (new) An apparatus comprising:

a container configured to be suspended from an aircraft flying over a ground target area, said container having a container outlet and being vented to enable liquid contents of said container to exit said container through said container outlet by the force of only gravity; and

a diffuser configured to diffuse liquid, by the force of gravity, from said container outlet into air above the ground target area throughout a circular area extending horizontally outward beyond said container;

wherein said diffuser includes a diffuser inlet, a plurality of diffuser outlets, and a manifold communicating said diffuser inlet with said diffuser outlets, said manifold having rigid hydraulic lines extending radially outward from said diffuser inlet, and also having flexible hydraulic lines extending from said rigid hydraulic lines to said diffuser outlets to suspend said diffuser outlets from said rigid hydraulic lines under the force of gravity.
